

What is claimed is:

1. A plant wherein the activity of glutamate glyoxylate aminotransferase is lacked or reduced.

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2. The plant according to claim 1, wherein the activity of glutamate glyoxylate aminotransferase is lacked or reduced, and wherein the glutamate content of said plant has increased compared to the corresponding wild type plant which is cultivated under the same condition.

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3. The plant according to claim 1, wherein the activity of glutamate glyoxylate aminotransferase is lacked or reduced, and wherein the glutamate content of said plant is not less than 1.2 fold higher than the corresponding wild type plant which is cultivated under the same condition.

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4. The plant according to claim 1, wherein a function of a gene encoding a protein having the activity of glutamate glyoxylate aminotransferase is inhibited.

5. The plant according to claim 4, wherein a gene encoding the protein having the activity of glutamate glyoxylate aminotransferase is disrupted.

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6. The plant according to claim 4, wherein the expression of a gene encoding the protein having the activity of glutamate glyoxylate aminotransferase is inhibited.

7. The plant according to any one of claims 1 to 6, wherein the activity of glutamate glyoxylate aminotransferase is the activity in peroxisomes.

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8. The plant according to claim 7, wherein the activity of glutamate glyoxylate aminotransferase is the activity in peroxisomes in photosynthetic tissues.

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9. The plant according to any one of claims 4 to 6, wherein the protein having the activity of glutamate glyoxylate aminotransferase has the amino acid sequence of amino acid residue no.1 to amino acid residue no.478 in the sequence SEQ ID NO: 1.
- 5 10. The plant according to any one of claims 4 to 6, wherein the protein having the activity of glutamate glyoxylate aminotransferase has the amino acid sequence of amino acid residue no.1 to amino acid residue no.481 in the sequence SEQ ID NO: 1.
11. A seed of the plant according to any one of claims 1 to 10.
- 10 12. The seed according to claim 11, wherein the glutamate content is increased compared to a seed of the corresponding wild type plant which is cultivated under the same condition.
- 15 13. The seed according to claim 11, wherein the glutamate content is increased less than 1.2 fold compared to a seed of the corresponding wild type plant which is cultivated under the same condition.
- 20 14. A method of increasing the glutamate content in a plant and/or a seed compared to the corresponding wild type plant which is cultivated under the same condition, comprising the step of causing a defect or a reduction in the activity of glutamate glyoxylate transferase.
- 25 15. The method according to claim 14, wherein a function of a gene encoding a protein having the activity of glutamate glyoxylate aminotransferase is inhibited.
16. The method according to claim 15, wherein a gene encoding the protein having the activity of glutamate glyoxylate aminotransferase is disrupted.
- 30 17. The method according to claim 15, wherein an expression of a gene encoding the

protein having the activity of glutamate glyoxylate aminotransferase is inhibited.

18. The method according to any one of claims 14 to 17, wherein the activity of glutamate glyoxylate aminotransferase is the activity in peroxisomes.

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19. The method according to claim 18, wherein the activity of glutamate glyoxylate aminotransferase is the activity in peroxisomes in photosynthetic tissues.

20. The method according to any one of claims 14 to 17, wherein the protein having
10 the activity of glutamate glyoxylate aminotransferase has the amino acid sequence of amino acid residue no.1 to.478 in the sequence SEQ ID NO: 1.

21. The method according to any one of claims 14 to 17, wherein the protein having
15 the activity of glutamate glyoxylate aminotransferase has the amino acid sequence of amino acid residue no.1 to 481 in the sequence SEQ ID NO: 1.

22. A method of producing a seed having increased glutamate content compared to a seed obtained from the corresponding wild type plant which is cultivated under the same condition, comprising the steps of cultivating the plant according to any one of
20 claims 1 to 10 and harvesting a seed from said plant.

23. Use of the plant according to any one of claims 1 to 10 for producing a food.

24. A food containing the plant according to any one of claims 1 to 10.
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25. Use of the seed according to any one of claims 11 to 13 for producing a food.

26. A food containing the seed according to any one of claims 11 to 13.